

Notice of Allowability

Application No.

10/508,924

Examiner

Tram H. Nguyen

Applicant(s)

MOTOYOSHI ET AL.

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/17/2007.
2. ☒ The allowed claim(s) is/are 9-13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

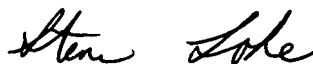
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

STEVEN LOKE
SUPERVISORY PATENT EXAMINER



DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Depke on November 1st, 2007.

The application has been amended as follows:

- Lines 11-14 of claim 9 has been changed as: "said magnetic memory device comprises a **first portion of a** magnetic flux concentrator of high-permeability layer formed between said first wiring and said tunnel magnetoresistance element and a **second portion of said magnetic flux concentrator of high permeability layer** adjacent the lateral sides of said tunnel magnetoresistance element, with an insulating film interposed therebetween."

- Line 2 of claim 12 has been changed as "9, wherein at least **the second portion of said magnetic flux concentrator of high permeability layer** formed on the lateral sides"

Allowable Subject Matter

Claims 9-13 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding **claim 9**, the prior art of record alone or in combination neither teaches nor makes obvious the invention of a nonvolatile magnetic memory device of the type wherein "said magnetic memory device comprises a **first portion of a magnetic flux concentrator of high-permeability layer** formed between said first wiring and said tunnel magnetoresistance element and a **second portion of said magnetic flux concentrator of high permeability layer** adjacent the lateral sides of said tunnel magnetoresistance element, with an insulating film interposed therebetween" in combination of all of the limitations of claim 9. Claims 12,13 include all of the limitations of claim 9.

Regarding **claim 10**, the prior art of record alone or in combination neither teaches nor makes obvious the invention of a nonvolatile magnetic memory device of the type wherein "a first magnetic flux concentrator of high-permeability layer formed at least adjacent both of the lateral sides of said first wiring and on the side of said first wiring which is opposite to the side facing said tunnel magnetoresistance element and a second magnetic flux concentrator of high-permeability layer formed between said first wiring and said tunnel magnetoresistance element and on the lateral sides of said tunnel magnetoresistance element, with an insulating film interposed therebetween" in combination of all of the limitations of claim 10. Claim 11 includes all of the limitations of claim 10.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tram H. Nguyen whose telephone number is (571)272-5526. The examiner can normally be reached on Monday-Friday, 8:30 AM – 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached on (571)272-1657. The fax numbers for all communication(s) is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1625.

THN
Art Unit 2818
11/01/2007

STEVEN LOKE
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Steven Loke", is written below the printed name and title.